



ICAO ENGINE EXHAUST EMISSIONS DATA SHEET

SUBSONIC ENGINES

ENGINE IDENTIFICATION: CF6-80E1A4 BYPASS RATIO: 5.1
 UNIQUE ID NUMBER: 4GE081 PRESSURE RATIO (π_{oo}): 34.5
 COMBUSTOR: Low emissions
 ENGINE TYPE: TF RATED THRUST (F_{oo}) (kN): 297.4

REGULATORY DATA

CHARACTERISTIC VALUE:	HC	CO	NO _x	SMOKE NUMBER
D _p /F _{oo} (g/kN) or SN	1.4	20.3	53.5	6.5
AS % OF ORIGINAL LIMIT	7.1	17.2	49.1	37.0
AS % OF CAEP/2 LIMIT (NO _x)			61.4	
AS % OF CAEP/4 LIMIT (NO _x)			70.4	
AS % OF CAEP/6 LIMIT (NO _x)			78.7	
AS % OF CAEP/8 LIMIT (NO _x)			90.5	

DATA STATUS

- PRE-REGULATION
 x CERTIFICATION
 - REVISED (SEE REMARKS)

TEST ENGINE STATUS

x NEWLY MANUFACTURED ENGINES
 - DEDICATED ENGINES TO PRODUCTION STANDARD
 - OTHER (SEE REMARKS)

EMISSIONS STATUS

x DATA CORRECTED TO REFERENCE
 (ANNEX 16 VOLUME II)

CURRENT ENGINE STATUS

(IN PRODUCTION, IN SERVICE UNLESS OTHERWISE NOTED)
 x OUT OF PRODUCTION (DATE: -)
 - OUT OF SERVICE (DATE: -)

MEASURED DATA

MODE	POWER SETTING (%F _{oo})	TIME (minutes)	FUEL FLOW (kg/s)	EMISSIONS INDICES (g/kg)			SMOKE NUMBER
				HC	CO	NO _x	
TAKE-OFF	100	0.7	2.904	0.04	0.04	31.28	5.9
CLIMB OUT	85	2.2	2.337	0.04	0.02	23.54	5.5
APPROACH	30	4.0	0.744	0.09	1.44	12.66	0.0
IDLE	7	26.0	0.227	0.92	15.05	4.77	0.0
LTO TOTAL FUEL (kg) or EMISSIONS (g)			963	359	5598	15027	-
NUMBER OF ENGINES				3	3	3	3
NUMBER OF TESTS				7	7	7	7
AVERAGE D _p /F _{oo} (g/kN) or AVERAGE SN (MAX)				1.2	18.8	50.5	5.9
SIGMA (D _p /F _{oo} in g/kN, or SN)							
RANGE (D _p /F _{oo} in g/kN, or SN)							

ACCESSORY LOADS

POWER EXTRACTION 0 (kW) AT - POWER SETTINGS
 STAGE BLEED 0 (% CORE FLOW) AT - POWER SETTINGS

ATMOSPHERIC CONDITIONS

BAROMETER (kPa)	97.6-98.2
TEMPERATURE (K)	279-293
ABS HUMIDITY (kg/kg)	0.00457-0.00743

FUEL

SPEC	Jet A
H/C	1.94
AROM (%)	15.3

MANUFACTURER: General Electric Company
 TEST ORGANIZATION: CF6 Eval Engineering
 TEST LOCATION: Site IIIB, PTO, Ohio
 TEST DATES: 13/01/1996-16/03/1996

NO_x REGULATION PARAGRAPH

	2.3.2 c) (CAEP/4)
x	2.3.2 d) (CAEP/6)
	2.3.2 e) (CAEP/8)

REMARKS

1. Ref GE Report TM95-17 & GEAE R95AEB272-2.
2. Engine S/N 704/233, 704/234 & 704/378
3. Low emissions combustor

Compliance with Fuel Venting requirements: -

('x' if complies, 'PR' if pre-regulation, '-' if information is not available)